



HEAT TRANSFER FLUIDS

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XCEL THERM[®] 500

Heat/cool from -80°F to 500°F (-60°C to 260°C); non-toxic, odorless and food contact rated (NSF HT1); High heat transfer for increased production output. Used for food processing, packaging, plastic molding and extrusion and electronics.

TYPICAL PROPERTIES

Key Operating Temperatures		
Maximum Bulk Fluid Operating Temperature	500°F	260°C
Maximum Film Temperature	550°F	288°C
Freezing/Melting Point	-103°F	< -75°C
Flash Point (PMCC)(ASTM D93)(min)	>288°F	> 142°C
Flash Point (COC)(ASTM D92)(min)	>315°F	> 157°C
Fire Point (ASTM D92)(min)	>338°F	> 170°C
Autoignition Temperature (minimum)	625°F	329°C
Pour Point	<-94°F	< -70°C
Pumpability, at 300 mm ² /s (cSt)	-38°F	-39°C
Pumpability (2000cP)	-80°F	-48°C
Physical Properties		
Composition	Radco-engineered Polyalphaolefin	
Odor	None	
Appearance	Bright & clear	
Density, at 77°F (25°C)	6.58 lbs/gal	
Specific Gravity, at 25°C (77°F)	0.79	
Average Molecular Weight	275 g/mol	
Moisture Content (maximum)	50 ppm	
Kinematic Viscosity, at 40°C (104°F)	4.2 mm ² /s (cSt)	
Kinematic Viscosity, at 100°C (212°F)	1.7 mm ² /s (cSt)	
Coefficient of Thermal Expansion, at 392°F/200°C	0.00146/°F	0.00263/°C
Volume Contraction Upon Freezing/Melting	0.9626 lbs/gal	115.3 kg/m ³
Heat of Vaporization, at Maximum Use Temperature	115 BTU/lb	267.5 kJ/kg
Heat of Fusion	>8.6 BTU/lb	>20 J/g
* Data represents typical laboratory samples and are not guaranteed for all samples		